CLAIMS

WHAT IS CLAIMED IS:

1. A method comprising:

requesting a program to modify the program's performance if a service class associated with the program fails to meet a performance goal.

2. The method of claim 1, wherein the requesting further comprises:

requesting the program to run faster.

3. The method of claim 1, wherein the requesting further comprises:

requesting the program to use more of a resource associated with the program.

4. The method of claim 1, wherein the requesting further comprises:

requesting the program to run slower.

5. The method of claim 1, wherein the requesting further comprises:

requesting the program to use less of a resource associated with the program.

6. The method of claim 1, wherein the requesting further comprises:

requesting the program to make an incremental performance modification.

7. The method of claim 6, further comprising:

repeatedly performing the requesting until the service class meets the performance goal.

8. The method of claim 6, further comprising:

repeatedly performing the requesting until the service class shows no improvement towards the performance goal.

9. The method of claim 8, further comprising:

requesting the program to reset to a previous state if the service class shows no improvement towards the performance goal.

10. The method of claim 1, further comprising:

determining whether the service class meets the performance goal after the requesting.

11. An apparatus comprising:

means for selecting a program if a service class fails to meet a performance goal; and

means for requesting the program to self-tune.

12. The apparatus of claim 11, further comprising:

means for determining whether the service class meets the performance goal after the means for requesting.

13. The apparatus of claim 11, wherein the means for selecting further comprises:

means for determining that the program is a bottleneck for the service class.

14. The apparatus of claim 13, wherein the means for determining further comprises:

means for determining that a response time for transactions in the service class that are associated with the program divided by the response time for all transactions in the service class is greater than a threshold.

15. The apparatus of claim 13, wherein the means for determining further comprises:

means for determining that a response time for transactions in the service class that are associated with the program is greater than a threshold.

16. The apparatus of claim 11, wherein the means for selecting further comprises:

means for determining that the program is associated with a majority of work in the service class.

17. The apparatus of claim 16, wherein the means for determining further comprises:

means for determining that the program is associated with a majority of transactions currently in the service class.

18. The apparatus of claim 16, wherein the means for determining further comprises:

means for determining that the program is associated with a majority of transactions in the service class within a time period.

19. The apparatus of claim 16, wherein the means for determining further comprises:

means for determining that the program is associated with transactions within a time period whose aggregate response time is greater than half of a response time for all transactions in the service class during the time period.

20. A signal-bearing medium encoded with instructions, wherein the instructions when executed comprise:

selecting a program if a service class fails to meet a performance goal;

requesting the program to incrementally self-tune; and

determining whether the service class meets the performance goal after the requesting.

21. The signal-bearing medium of claim 20, wherein the selecting further comprises:

determining that a response time of transactions in the service class that are associated with the program is less than a threshold percentage of a response-time goal for the program.

22. The signal-bearing medium of claim 20, wherein the selecting further comprises:

determining that a response time of all transactions initiated by the program is less than a threshold percentage of a response-time goal for the program.

23. The signal-bearing medium of claim 20, wherein the selecting further comprises:

determining that the program has a priority below a threshold.

24. The signal-bearing medium of claim 20, further comprising:

if the service class does not meet the performance goal after the requesting, determining whether performance of the service class has improved.

25. The signal-bearing medium of claim 24, further comprising:

if the performance of the service class has improved, repeating the requesting so long as the service class does not meet the performance goal and the performance of the service class improves.

26. The signal-bearing medium of claim 24, further comprising:

if the performance of the service class has not improved, requesting the program to reset to a previous tuned state.

27. The signal-bearing medium of claim 20, wherein the performance goal is a response time goal for the service class.

28. The signal-bearing medium of claim 20, wherein the program is associated with at least one transaction in the service class.

29. The signal-bearing medium of claim 20, wherein the requesting the program to incrementally self-tune further comprises:

requesting the program to increase performance if the program is a bottleneck for the service class or if the program initiates a majority of work associated with the service class.

30. The signal-bearing medium of claim 20, wherein the requesting the program to incrementally self-tune further comprises:

requesting the program to decrease performance if a response time of transactions in the service class that are associated with the program is less than a threshold percentage of a response-time goal for the program.

31. An electronic device comprising:

a processor; and

a storage device encoded with instructions, wherein the instructions when executed on the processor comprise:

receiving a plurality of notifications indicating that a respective plurality of programs support performance tuning,

determining that a first service class failed to meet a performance goal,

selecting at least one program from the plurality of programs, and

requesting the at least one program to incrementally self-tune.

32. The electronic device of claim 31, wherein the requesting further comprises:

requesting the at least one program to self-tune a resource associated with the at least one program.

33. The electronic device of claim 31, wherein the instructions further comprise.

requesting the at least one program to self-tune a resource internal to the program.

34. The electronic device of claim 31, wherein the instructions further comprise.

determining whether the requesting caused performance of the first service class to improve.

35. The electronic device of claim 34, wherein the instructions further comprise:

if the requesting did not cause the performance of the first service class to improve, selecting a second program from the plurality of programs and requesting the second program to incrementally self-tune.

36. The electronic device of claim 34, wherein the instructions further comprise:

if the requesting did cause the performance of the first service class to improve, repeating the requesting until the performance goal is met or until the performance of the first service class no longer improves.

37. The electronic device of claim 31, wherein the instructions further comprise:

if the requesting did not cause performance of the first service class to meet the performance goal, tuning a global resource that is common to all the plurality of programs.

38. The electronic device of claim 34, wherein the instructions further comprise:

if the requesting did cause the performance of the first service class to improve, determining whether performance of a second service class was impaired subsequent to the requesting, wherein the second service class has a higher priority than the first service class.

39. The electronic device of claim 38, wherein the instructions further comprise:

if the performance of the second service class was impaired subsequent to the requesting, resetting the program to a previous tuned state.

40. The electronic device of claim 31, wherein the instructions further comprise:

globally tuning the electronic device prior to the determining.

41. The electronic device of claim 31, wherein the requesting further comprises:

notifying the at least one program of a global resource available for use by the at least one program.